

## RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10/807,517A  
Source: TFW/6  
Date Processed by STIC: 7/13/06

# *ENTERED*



IFW16

## RAW SEQUENCE LISTING

DATE: 07/13/2006

PATENT APPLICATION: US/10/807,517A

TIME: 08:43:40

Input Set : F:\P-2762-US3.txt

Output Set: N:\CRF4\07132006\J807517A.raw

```

3 <110> APPLICANT: GTx, Inc.
4     et al., Steiner
5     Steiner, Et al.,
7 <120> TITLE OF INVENTION: ISOLATED NUCLEIC ACIDS ENCODING RAT P-HYDE PROTEIN
9 <130> FILE REFERENCE: P-2762-US3
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/807,517A
C--> 11 <141> CURRENT FILING DATE: 2004-03-24
11 <160> NUMBER OF SEQ ID NOS: 11
13 <170> SOFTWARE: PatentIn version 3.3
15 <210> SEQ ID NO: 1
16 <211> LENGTH: 1886
17 <212> TYPE: DNA
18 <213> ORGANISM: Human
20 <400> SEQUENCE: 1
21 ggggagctgc cgcggtcgct ccgagcggcg ggccgcagag ccaccaaagt gccagaagag      60
23 atggacaagc cactgatcag cctccacctg gtggacagcg atagtagcct tgccaaggtc      120
25 cccgatgagg cccccaaagt gagcatcctg ggtagcgggg actttgcccg ctccctggcc      180
27 acacgcctgg tgggctctgg cttcaaagtg gtggtgggga gccgcaaccc caaacgcaca      240
29 gccaggctgt ttccctcagc ggcccaagtg actttccaag aggaggcagt gagctccccg      300
31 gaggtcatct ttgtggctgt gttccgggag cactactctt cactgtgcag tctcagtgc      360
33 cagctggcgg gcaagatcct ggtggatgtg agcaacccta cagagcaaga gcaccttcag      420
35 catcgtgagt ccaatgctga gtacctggcc tccctcttcc ccacttgcaac agtgggtcaag      480
37 gccttcaatg tcatctctgc ctggaccctg caggctggcc caagggatgg taacgggcag      540
39 gtgcccctct gcggtgacca gccagaagcc aagcgtgctg tctcggagat ggcgctcgcc      600
41 atgggcttca tgcccgtgga catgggatcc ctggcgctcag cctgggaggt ggaggccatg      660
43 cccctgcgcc tcctcccggc ctggaagggtg cccaccctgc tggccctggg gctcttcgtc      720
45 tgcttctatg cctacaactt cgtccgggac gttctgcagc cctatgtgca ggaaagccag      780
47 aacaagttct tcaagctgcc cgtgtccgtg gtcaacacca cactgccgtg cgtggcctac      840
49 gtgctgctgt cactcgtgta cttgcccggc gtgctggcgg ctgccctgca gctgcggcgc      900
51 ggcaccaagt accagcgctt ccccgactgg ctggaccact ggctacagca ccgcaagcag      960
53 atcgggctgc tcagcttctt ctgcgcgccg ctgcacgccc tctacagctt ctgcttgccg      1020
55 ctgcgcgccg cccaccgcta cgacctggtc aacctggcag tcaagcaggt cttggccaac      1080
57 aagagccacc tctgggtgga ggaggtctgg cggatggaga tctacctctc cctgggagtg      1140
59 ctggccctcg gcacgttgtc cctgctggcc gtgacctcac tgccgtccat tgcaaactcg      1200
61 ctcaactgga gggagttcag cttcgttcag tcctcactgg gctttgtggc cctcgtgctg      1260
63 agcacactgc acacgctcac ctacggctgg acccgcgcc tcgaggagag ccgctacaag      1320
65 ttctacctgc ctcccacctt cagctcacg ctgctgggtg cctgcgtcgt catcctggcc      1380
67 aaagccctgt ttctcctgcc ctgcatcagc cgcagactcg ccaggatccg gagaggctgg      1440
69 gagagggaga gcaccatcaa gttcacgctg cccacagacc acgccctggc cgagaagacg      1500
71 agccacgtat gaggtgcctg ccctgggctc tggaccccgg gcacacgagg gacggtgccc      1560
73 tgagcccgtt aggttttctt ttcttggtgg tgcaaagtgg tataactgtg tgcaaatagg      1620
75 aggtttgagg tccaaattcc tgggactcaa atgtatgcag tactattcag aatgatatac      1680
77 acacatatgt gtatatgtat ttacatatat tccacatata taacaggatt tgcaattata      1740

```

## RAW SEQUENCE LISTING

DATE: 07/13/2006

PATENT APPLICATION: US/10/807,517A

TIME: 08:43:40

Input Set : F:\P-2762-US3.txt

Output Set: N:\CRF4\07132006\J807517A.raw

```

79 catagctagc taaaaagttg ggtctctgag atttcaactt gtagatttaa aaacaagtgc 1800
81 cgtacgttaa gagaagagca gatcatgcta ttgtgacatt tgcagagata tacacacact 1860
83 ttttgtacag aaaaaaaaaa aaaaaa 1886
86 <210> SEQ ID NO: 2
87 <211> LENGTH: 487
88 <212> TYPE: PRT
89 <213> ORGANISM: Human
91 <400> SEQUENCE: 2
93 Met Pro Glu Glu Met Asp Lys Pro Leu Ile Ser Leu His Leu Val Asp
94 1 5 10 15
97 Ser Asp Ser Ser Leu Ala Lys Val Pro Asp Glu Ala Pro Lys Val Ser
98 20 25 30
101 Ile Leu Gly Ser Gly Asp Phe Ala Arg Ser Leu Ala Thr Arg Leu Val
102 35 40 45
105 Gly Ser Gly Phe Lys Val Val Val Gly Ser Arg Asn Pro Lys Arg Thr
106 50 55 60
109 Ala Arg Leu Phe Pro Ser Ala Ala Gln Val Thr Phe Gln Glu Glu Ala
110 65 70 75 80
113 Val Ser Ser Pro Glu Val Ile Phe Val Ala Val Phe Arg Glu His Tyr
114 85 90 95
117 Ser Ser Leu Cys Ser Leu Ser Asp Gln Leu Ala Gly Lys Ile Leu Val
118 100 105 110
121 Asp Val Ser Asn Pro Thr Glu Gln Glu His Leu Gln His Arg Glu Ser
122 115 120 125
125 Asn Ala Glu Tyr Leu Ala Ser Leu Phe Pro Thr Cys Thr Val Val Lys
126 130 135 140
129 Ala Phe Asn Val Ile Ser Ala Trp Thr Leu Gln Ala Gly Pro Arg Asp
130 145 150 155 160
133 Gly Asn Gly Gln Val Pro Ile Cys Gly Asp Gln Pro Glu Ala Lys Arg
134 165 170 175
137 Ala Val Ser Glu Met Ala Leu Ala Met Gly Phe Met Pro Val Asp Met
138 180 185 190
141 Gly Ser Leu Ala Ser Ala Trp Glu Val Glu Ala Met Pro Leu Arg Leu
142 195 200 205
145 Leu Pro Ala Trp Lys Val Pro Thr Leu Leu Ala Leu Gly Leu Phe Val
146 210 215 220
149 Cys Phe Tyr Ala Tyr Asn Phe Val Arg Asp Val Leu Gln Pro Tyr Val
150 225 230 235 240
153 Gln Glu Ser Gln Asn Lys Phe Phe Lys Leu Pro Val Ser Val Val Asn
154 245 250 255
157 Thr Thr Leu Pro Cys Val Ala Tyr Val Leu Leu Ser Leu Val Tyr Leu
158 260 265 270
161 Pro Gly Val Leu Ala Ala Ala Leu Gln Leu Arg Arg Gly Thr Lys Tyr
162 275 280 285
165 Gln Arg Phe Pro Asp Trp Leu Asp His Trp Leu Gln His Arg Lys Gln
166 290 295 300
169 Ile Gly Leu Leu Ser Phe Phe Cys Ala Ala Leu His Ala Leu Tyr Ser
170 305 310 315 320
173 Phe Cys Leu Pro Leu Arg Arg Ala His Arg Tyr Asp Leu Val Asn Leu

```

## RAW SEQUENCE LISTING

DATE: 07/13/2006

PATENT APPLICATION: US/10/807,517A

TIME: 08:43:40

Input Set : F:\P-2762-US3.txt

Output Set: N:\CRF4\07132006\J807517A.raw

```

174                               325                               330                               335
177 Ala Val Lys Gln Val Leu Ala Asn Lys Ser His Leu Trp Val Glu Glu
178                               340                               345                               350
181 Val Trp Arg Met Glu Ile Tyr Leu Ser Leu Gly Val Leu Ala Leu Gly
182                               355                               360                               365
185 Thr Leu Ser Leu Leu Ala Val Thr Ser Leu Pro Ser Ile Ala Asn Ser
186                               370                               375                               380
189 Leu Asn Trp Arg Glu Phe Ser Phe Val Gln Ser Ser Leu Gly Phe Val
190 385                               390                               395                               400
193 Ala Leu Val Leu Ser Thr Leu His Thr Leu Thr Tyr Gly Trp Thr Arg
194                               405                               410                               415
197 Ala Phe Glu Glu Ser Arg Tyr Lys Phe Tyr Leu Pro Pro Thr Phe Thr
198                               420                               425                               430
201 Leu Thr Leu Leu Val Pro Cys Val Val Ile Leu Ala Lys Ala Leu Phe
202                               435                               440                               445
205 Leu Leu Pro Cys Ile Ser Arg Arg Leu Ala Arg Ile Arg Arg Gly Trp
206                               450                               455                               460
209 Glu Arg Glu Ser Thr Ile Lys Phe Thr Leu Pro Thr Asp His Ala Leu
210 465                               470                               475                               480
213 Ala Glu Lys Thr Ser His Val
214                               485

```

217 &lt;210&gt; SEQ ID NO: 3

218 &lt;211&gt; LENGTH: 2118

219 &lt;212&gt; TYPE: DNA

220 &lt;213&gt; ORGANISM: Human

222 &lt;400&gt; SEQUENCE: 3

```

223 ggggagctgc cgcggtcgct ccgagcggcg ggccgcagag ccaccaaagt gccagaagag      60
225 atggacaagc cactgatcag cctccacctg gtggacagcg atagtagcct tgccaaggctc      120
227 cccgatgagg ccccaaaagt gagcatcctg ggtagcgggg actttgcccg ctccctggcc      180
229 acacgcctgg tgggctctgg cttcaaagtg gtggtgggga gccgcaacc caaacgcaca      240
231 gccaggctgt ttccctcagc ggcccaagtg actttccaag aggaggcagt gagctccccg      300
233 gaggtcatct ttgtggctgt gttccgggag cactactctt cactgtgcag tctcagtgc      360
235 cagctggcgg gcaagatcct ggtggatgtg agcaacccta cagagcaaga gcaccttcag      420
237 catcgtgagt ccaatgctga gtacctggcc tccctcttcc ccacttgac agtggtcaag      480
239 gccttcaatg tcactctctg ctggaccctg caggctggcc caagggatgg taacgggcag      540
241 gtgcccattc gcggtgacca gccagaagcc aagcgtgctg tctcggagat ggcgctcgcc      600
243 atgggcttca tgcccgtgga catgggatcc ctggcgtcag cctgggaggt ggaggccatg      660
245 cccctgcgcc tctcccggc ctggaagggt cccaccctgc tggccctggg gctcttcgtc      720
247 tgcttctatg cctacaactt cgtccgggac gttctgcagc cctatgtgca ggaaagccag      780
249 aacaagttct tcaagctgcc cgtgtccgtg gtcaaacacca cactgccgtg cgtggcctac      840
251 gtgctgctgt cactcgtgta cttgcccggc gtgctggcgg ctgccctgca gctgcggcgc      900
253 ggcaccaagt accagcgtt ccccgactgg ctggaccact ggctacagca ccgcaagcag      960
255 atcgggctgc tcagcttctt ctgcgccgcc ctgcacgccc tctacagctt ctgcttgccg     1020
257 ctgcgccgcg cccaccgcta cgacctggtc aacctggcag tcaagcaggt cttggccaac     1080
259 aagagccacc tctgggtgga ggaggtctgg cggatggaga tctacctctc cctgggagtg     1140
261 ctggccctcg gcacgttgct cctgctggcc gtgacctcac tgccgtccat tgcaaactcg     1200
263 ctcaactgga gggagttcag cttcgttcag tgtgtggcaa cttccagtgc aggaaacaca     1260
265 ggcagtggaa cccgaagacc tgaatctcag tccaagacc cccacttacc tgccccgcat     1320
267 catcagacaa gtttcctagg ccctcggagc ttctgctgct cacttgtgcc tgtgtccacc     1380

```

## RAW SEQUENCE LISTING

DATE: 07/13/2006

PATENT APPLICATION: US/10/807,517A

TIME: 08:43:40

Input Set : F:\P-2762-US3.txt

Output Set: N:\CRF4\07132006\J807517A.raw

```

269 ccatatgggtc atcaagagga tttgagctgg acacgttaaa tgcaggatgc gtgcagccaa 1440
271 cagtggcatg ctggcttttg agtcctcact gggctttgtg gccctcgtgc tgagcacact 1500
273 gcacacgctc acctacgggt ggacccgcgc cttcgaggag agccgctaca agttctacct 1560
275 gcctcccacc ttcacgctca cgctgctggg gccctgcgtc gtcctcctgg ccaaagccct 1620
277 gtttctcctg ccctgcatca gccgcagact cgccaggatc cggagaggct gggagaggga 1680
279 gagcaccatc aagttcacgc tgcccacaga ccacgccctg gccgagaaga cgagccacgt 1740
281 atgaggtgcc tgccctgggc tctggacccc gggcacacga gggacggtgc cctgagcccg 1800
283 ttaggttttc ttttcttggt ggtgcaaagt ggtataactg tgtgcaaata ggaggtttga 1860
285 ggtccaaatt cctgggactc aaatgtatgc agtactattc agaatgatat acacacatat 1920
287 gtgtatatgt atttacatat attccacata tataacagga tttgcaatta tacatagcta 1980
289 gctaaaaagt tgggtctctg agatttcaac ttgtagattt aaaaacaagt gccgtacgtt 2040
291 aagagaagag cagatcatgc tattgtgaca tttgcagaga tatacacaca ctttttgtac 2100
293 agaaaaaaaa aaaaaaaaaa 2118
296 <210> SEQ ID NO: 4
297 <211> LENGTH: 456
298 <212> TYPE: PRT
299 <213> ORGANISM: Human
301 <400> SEQUENCE: 4
303 Met Pro Glu Glu Met Asp Lys Pro Leu Ile Ser Leu His Leu Val Asp
304 1 5 10 15
307 Ser Asp Ser Ser Leu Ala Lys Val Pro Asp Glu Ala Pro Lys Val Ser
308 20 25 30
311 Ile Leu Gly Ser Gly Asp Phe Ala Arg Ser Leu Ala Thr Arg Leu Val
312 35 40 45
315 Gly Ser Gly Phe Lys Val Val Val Gly Ser Arg Asn Pro Lys Arg Thr
316 50 55 60
319 Ala Arg Leu Phe Pro Ser Ala Ala Gln Val Thr Phe Gln Glu Glu Ala
320 65 70 75 80
323 Val Ser Ser Pro Glu Val Ile Phe Val Ala Val Phe Arg Glu His Tyr
324 85 90 95
327 Ser Ser Leu Cys Ser Leu Ser Asp Gln Leu Ala Gly Lys Ile Leu Val
328 100 105 110
331 Asp Val Ser Asn Pro Thr Glu Gln Glu His Leu Gln His Arg Glu Ser
332 115 120 125
335 Asn Ala Glu Tyr Leu Ala Ser Leu Phe Pro Thr Cys Thr Val Val Lys
336 130 135 140
339 Ala Phe Asn Val Ile Ser Ala Trp Thr Leu Gln Ala Gly Pro Arg Asp
340 145 150 155 160
343 Gly Asn Gly Gln Val Pro Ile Cys Gly Asp Gln Pro Glu Ala Lys Arg
344 165 170 175
347 Ala Val Ser Glu Met Ala Leu Ala Met Gly Phe Met Pro Val Asp Met
348 180 185 190
351 Gly Ser Leu Ala Ser Ala Trp Glu Val Glu Ala Met Pro Leu Arg Leu
352 195 200 205
355 Leu Pro Ala Trp Lys Val Pro Thr Leu Leu Ala Leu Gly Leu Phe Val
356 210 215 220
359 Cys Phe Tyr Ala Tyr Asn Phe Val Arg Asp Val Leu Gln Pro Tyr Val
360 225 230 235 240
363 Gln Glu Ser Gln Asn Lys Phe Phe Lys Leu Pro Val Ser Val Val Asn

```



## RAW SEQUENCE LISTING

DATE: 07/13/2006

PATENT APPLICATION: US/10/807,517A

TIME: 08:43:40

Input Set : F:\P-2762-US3.txt

Output Set: N:\CRF4\07132006\J807517A.raw

```

364          245          250          255
367 Thr Thr Leu Pro Cys Val Ala Tyr Val Leu Leu Ser Leu Val Tyr Leu
368          260          265          270
371 Pro Gly Val Leu Ala Ala Ala Leu Gln Leu Arg Arg Gly Thr Lys Tyr
372          275          280          285
375 Gln Arg Phe Pro Asp Trp Leu Asp His Trp Leu Gln His Arg Lys Gln
376          290          295          300
379 Ile Gly Leu Leu Ser Phe Phe Cys Ala Ala Leu His Ala Leu Tyr Ser
380 305          310          315          320
383 Phe Cys Leu Pro Leu Arg Arg Ala His Arg Tyr Asp Leu Val Asn Leu
384          325          330          335
387 Ala Val Lys Gln Val Leu Ala Asn Lys Ser His Leu Trp Val Glu Glu
388          340          345          350
391 Val Trp Arg Met Glu Ile Tyr Leu Ser Leu Gly Val Leu Ala Leu Gly
392          355          360          365
395 Thr Leu Ser Leu Leu Ala Val Thr Ser Leu Pro Ser Ile Ala Asn Ser
396          370          375          380
399 Leu Asn Trp Arg Glu Phe Ser Phe Val Gln Cys Val Ala Thr Ser Ser
400 385          390          395          400
403 Ala Gly Asn Thr Gly Ser Gly Thr Arg Arg Pro Glu Ser Gln Ser Gln
404          405          410          415
407 Asp Pro His Leu Pro Ala Pro His His Gln Thr Ser Phe Leu Gly Pro
408          420          425          430
411 Arg Ser Phe Cys Cys Ser Leu Val Pro Val Ser Thr Pro Tyr Gly His
412          435          440          445
415 Gln Glu Asp Leu Ser Trp Thr Arg
416          450          455

```

419 &lt;210&gt; SEQ ID NO: 5

420 &lt;211&gt; LENGTH: 2714

421 &lt;212&gt; TYPE: DNA

422 &lt;213&gt; ORGANISM: Rat

424 &lt;400&gt; SEQUENCE: 5

```

425 gaattcggca cgaggctgcc gaggcactgt gatgtccggg gagatggaca aaccgctcat      60
427 cagtcgccgc ttggtggaca gtgatggcag tctggctgag gtccccaagg aggctcccaa      120
429 agtgggcatc ctgggcagcg gggattttgc ccggtccttg gccacacgcc tgggtgggctc      180
431 tggcttcttt gtggtggtgg gaagccgtaa ccccaaacgc actgccggcc tcttcccctc      240
433 cttagcccaa gtgactttcc aggaggaggc cgtgagctct ccagagggtca tctttgtggc      300
435 cgtgttccgg gagcactact cctcactgtg cagtcttgct gaccagttgg ctggcaagat      360
437 cctagtggat gtaagcaacc ccacggagaa ggagcgtctt cagcaccgcc agtcgaacgc      420
439 cgagtacctg gcctccctct tccctgcctg cactgtggtc aaggccttca acgtcatctc      480
441 tgcattggcc ctacaggctg gcccaaggga tgggaacagg caggtgctca tctgcggtga      540
443 ccagctggaa gccaagcaca ccgtctcaga gatggcgcgc gccatgggtt tcacccact      600
445 ggacatggga tccctggcct cagcgaggga ggtagaggcc ataccctgc gcctccttcc      660
447 atcctggaag gtgcccaccc tcctggccct ggggctaagc acacaaagct atgcctacaa      720
449 cttcatccgg gacgttctac agccgtacat ccggaagat gagaacaagt tctacaagat      780
451 gcccctgtct gtggtcaaca ccacgatacc ctgtgtggct tacgtgctgc tgtccctggt      840
453 ttacctgcct ggtgtgctgg cagctgccct tcagctgagg agggggacca agtaccagcg      900
455 ctcccagac tggctggacc attggctgca gcaccgcaag cagatcgggc tactcagctt      960
457 ttttttcgcc atgctgcacg ctctctacag cttctgcctg ccgctgcgcc gctcccaccg     1020

```

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 07/13/2006  
PATENT APPLICATION:    US/10/807,517A      TIME: 08:43:41

Input Set : F:\P-2762-US3.txt  
Output Set: N:\CRF4\07132006\J807517A.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:10,11

VERIFICATION SUMMARY

DATE: 07/13/2006

PATENT APPLICATION: US/10/807,517A

TIME: 08:43:41

Input Set : F:\P-2762-US3.txt

Output Set: N:\CRF4\07132006\J807517A.raw

L:11 M:270 C: Current Application Number differs, Replaced Current Application No

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date